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TIGA EVERETTI.



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TRICHOSTOMUS RUFIFRONS

of which were obtained from a dealer at Singapore; but the exact locality of their habitat could not be satisfactorily determined.

Care must be taken not to confuse *Tudicula* of H. and A. Adams with *Tudicla* of Bolton, of which genus *T. (Murex) spirillus* of Linnæus is the type.

6. Contributions to the Ornithology of the Philippines.—  
No. IX. On the Collection made by Mr. A. H. Everett  
in the Island of Palawan<sup>1</sup>. By ARTHUR, Marquis of  
TWEEDDALE, F.R.S., President of the Society.

[Received May 16, 1878.]

(Plates XXXVII. & XXXVIII.)

Until visited by Dr. Steere in July 1874, when he remained for a month at the Spanish settlement of Puerto Princesa, the island of Palawan, so far as is on record, had not been explored by any naturalist. Nothing was known of its zoological productions; and its exact relationship as a zoogeographical area remained an unsolved problem. During his stay at Puerto Princesa Dr. Steere collected examples of 32 species of birds, all of which have been enumerated by Mr. Sharpe<sup>2</sup>.

At the end of November 1877 Mr. A. H. Everett arrived at Puerto Princesa, and remained until the beginning of January, when, becoming disabled by fever, he was obliged to return to Manilla to recruit his health. He, however, succeeded in collecting specimens of 52 species of birds, 32 of which are additional to those obtained by Dr. Steere. This last gentleman discovered 12 species not sent to me by Mr. Everett; so that the total of known Palawan species of birds (and all are from Puerto Princesa and its vicinity) now amounts to 64. This small number cannot exhaust the avifauna of this large island; and as Mr. Everett is now happily recovered, and has returned to Palawan, I propose postponing any remarks on the character of the Palawan ornithology until we are in possession of the wider evidence which further collections will doubtless supply. Generally, however, it may be affirmed from the data before us that the birds of Palawan represent mostly Bornean genera and species, although a few distinctly Philippine types also occur.

The following species in the present collection have not hitherto been described:—

- |  |                                     |
|--|-------------------------------------|
| 4. <i>Tiga everetti</i> .              | 22. <i>Brachypus cinereifrons</i> . |
| 12. <i>Dicrurus palawanensis</i> .     | 25. <i>Criniger palawanensis</i> .  |
| 17. <i>Broderipus palawanensis</i> .   | 34. <i>Cyrtostomus aurora</i> .     |
| 19. <i>Trichostoma rufifrons</i> .     | 39. <i>Corvus pusillus</i> .        |
| 20. <i>Dryocathaphus cinereiceps</i> . |                                     |

<sup>1</sup> I treat Palawan as being a Philippine Island in a political sense. It remains to be shown whether it does not in fact belong, zoologically, rather to Borneo.

<sup>2</sup> Trans. Linn. Soc. ser. 2, Zoology, vol. i.

## 1. TANYGNATHUS LUZONENSIS (3).

[P. Princesa, ♂, January 1878.]

Not separable from all other Philippine examples.

## 2. BUTASTUR INDICUS (20).

[P. Princesa, ♂ (?), November 28, 1877 : iris bright yellow ; cere light wax-yellow ; bill and nails black ; legs and feet dull yellow.]

## 3. CHRYSOCOLAPTES ERYTHROCEPHALUS.

*Chrysocolaptes erythrocephalus*, Sharpe, Tr. L. S. ser. 2, Zool. i. p. 315. no. 13, t. xlv. f. 1.

[P. Princesa, ♂, December 2, 1877 : iris crimson ; bill pale yellow tinged with green ; feet and claws grey-green. ♀, November 27 : iris crimson ; bill pale yellow tinged with green ; feet and claws greyish green.]

The male example is in full adult plumage. That of the female (hitherto undescribed) resembles the male in all respects excepting the crown of the head and the crest, the feathers of which are ruddy brown, each being tipped with a pale rusty-yellow drop or spot. The cheeks, chin, and throat are washed with dilute crimson, not intense as in the male.

## 4. TIGA EVERETTI. (Plate XXXVII.)

*Tiga javanensis* (Ljungh.), Sharpe, *t. c.* p. 315. no. 14?

Three examples, two of the adult male and one of the adult female, were obtained near Puerto Princesa by Mr. Everett. They probably belong to the species doubtfully identified by Mr. Sharpe (*l. c.*) with *T. javanensis*. From this species, as well as from all the other species of the genus known to me, the present bird differs in the female having the head and crest uniform dark brown, the latter being broadly terminated with crimson. The lower part of the throat and the upper breast are uniform buffy brown, and not squamate.

*Male.* Forehead, crown and crest, uropygium, and upper tail-coverts crimson. Many of the dorsal plumes washed with crimson. Lores buffy brown. Space behind the eyes creamy white, each feather narrowly margined with pale brown. A patch commencing below the posterior angle of the eye and including the ear-coverts dark brown, this colour being continued as a narrow band round the occiput. Space below the eye buffy cream-colour, which is continued as a narrow line on the cheek, and expands into a broad stripe down the sides of the neck. A brown stripe commencing at angle of mouth and descending down the sides of the neck ; a few crimson feathers on the inner edge of this stripe. Chin and upper throat buffy cream-colour, many of the feathers tipped dark brown. Lower throat and crop uniform buffy brown. Breast-feathers pale yellow, very narrowly margined and boldly centred with dark brown ; within the brown centres a pale yellow stripe of varying dimensions. Abdominal and ventral feathers and the under tail-coverts pale yellow, with generally two cross bands of

dark brown. Back, wing-coverts, outer edges of secondaries, and exposed surface of tertiaries and scapulars golden. Primaries and rectrices dark brown.

*Female.* Differs from the male in having the top of the head dark uniform brown, almost black, the crest-plumes being terminated with crimson.

Dimensions:—

|           | Wing.<br>in. | Tail.<br>in. | Tarsus.<br>in. | Culmen.<br>in. |
|-----------|--------------|--------------|----------------|----------------|
| ♂ . . . . | 5·37         | 4·12         | 1·00           | 1·37           |
| ♀ . . . . | 5·37         | 4·12         | 1·00           | 1·37           |

In one example (♂) the lower breast-markings are not so well defined, and the general markings of the lower surface are less pronounced. The upper tail-coverts are mostly black, some only being tipped with crimson, others with golden.

[P. Princessa, ♂, November 25, 1877: iris dark brown; bill black, basal half of mandible grey; feet greenish, nails grey. P. Princessa, ♀, November 27, 1877: iris crimson; other parts as in ♂.]

#### 5. EURYSTOMUS ORIENTALIS (37).

[P. Princessa, ♀, November 29, 1877.]

#### 6. CACOMANTIS MERULINUS (57)?

[P. Princessa, ♂, December 10, 1877; iris bright salmon-red; bill black, mandible light brown; feet yellow, claws black.]

A single example, not sufficiently mature to be identified with certainty.

#### 7. SURNICULUS LUGUBRIS.

*Cuculus lugubris*, Horsf. Tr. L. S. xiii. p. 175.

[P. Princessa, ♀, December 6, 1877: iris dark brown; bill black; feet dark grey.]

#### 8. PHENICOPHAES HARRINGTONI.

*Dryococcyx harringtoni*, Sharpe, t. c. p. 321. no. 34, f. 1.

[P. Princessa, ♂, November 29, 1877: iris light brown; orbital and loreal space deep crimson; bill light green, tinged with olive; feet and legs lead-grey; nails dark grey. ♀, December: iris brilliant yellow, with ring of ochreous orange.]

Of other males Mr. Everett notes the iris as being reddish brown.

This Coucal is a representative form of *P. curvirostris* and *P. erythrognathus*, closely resembling both species, but differing structurally in the shape and position of the nostril. Mr. Sharpe (P. Z. S. 1873, p. 604) has generically separated *P. curvirostris* from *P. erythrognathus*, on account of the shape and position of the nostrils in those two species being different, and for the same reason has established (*l. c.*) the genus *Dryococcyx* for the reception of this Palawan

representative form<sup>1</sup>. That three birds, one inhabiting Java, another Borneo, the Malay peninsula, and Sumatra, and the third Palawan, all so closely resembling each other in their colouring and markings that they are difficult to recognize without careful comparison of their shades and tints, should possess nostrils structurally differing in all three is remarkable; but is it a sufficient reason to place them in three different genera? I can only regard the character as being specific.

The plumage of the sexes is alike. The amount of dark chestnut on the middle pairs of rectrices varies considerably, from three inches to one inch in depth.

#### 9. *CENTROCOCCYX EURYCERCUS*.

*Centropus eurycercus*, A. Hay, Blyth, J. A. S. B. 1845, p. 551.

[P. Princessa, ♂, January 8, 1878: iris bright crimson; bill, legs, and feet black. ♂ (juv.), December 9, 1877: iris neutral tint; bill and legs jet-black.]

Rather smaller than the Malaccan type.

#### 10. *LANIUS LUZIONENSIS* (72).

[P. Princessa, ♂ ♀, December 6 and 11, 1877.]

#### 11. *GRAUCALUS SUMATRENSIS*.

*Ceblepyris sumatrensis*, S. Müller, Verh. Land- en Volkenk. p. 191.

[P. Princessa, ♀, December 1877: iris light lemon-yellow.]

Does not differ from Sumatran, Malaccan, and Bornean examples.

#### 12. *DICRURUS PALAWANENSIS*.

In the Philippines three species of *Dicruridæ* are known:—*D. balicassius*, type of the genus *Dicrurus*; *D. mirabilis*, its representative form; and *D. striatus*. This last, by its even, almost unfurcated tail, resembles *D. balicassius* in structure, but in its general colouring and in the distribution of its markings exhibits a close relationship to the Papuan and Malaccan species associated by Mr. Sharpe with *Chibia hottentotta*. These Papuan species seemed to me to belong to a group distinct from that represented by *D. balicassius* on the one hand and *Chibia hottentotta* on the other; and their geographical range favoured this view<sup>2</sup>. But Mr. Everett has discovered in Palawan a species which undoubtedly belongs to the Papuan section of the *Dicruridæ*; and it would appear that, with *D. striatus* as a connecting link, the Papuan and the Philippine species must be regarded as members of one section of the family, to which the title of *Dicrurus* should be applied. Besides this undescribed species, Palawan is inhabited by at least one other member of the family, belonging to the genus *Buchanga*; and Palawan and Lombeck are the only two islands or areas known to me where there is a second species associated with a true species of *Dicrurus*, unless,

<sup>1</sup> The type was from Balabac; but the Palawan bird does not appear to differ.

<sup>2</sup> Count T. Salvadori has recently (*antèa*, p. 88, note) proposed the generic title of *Dicruropsis* for this group.

indeed, *D. læmostictus* is shown to also inhabit New Ireland or *D. megarhynchus* New Britain.

*Male and female.* Upper surface of wings and tail burnished bronze-green. Glistening scale-like feathers on crown of head bluish metallic green. Neck-hackles and pectoral and gular spots dark metallic steel-blue; these spots, which extend from lower part of the throat and cover the breast, are lengthened and ovate in form rather than round, and occupy the tips of the feathers. With their exception, the entire under surface is dull jet-black. The nape, back, and uropygium is black with a blue gloss. The tail is forked for about one inch in depth; and the distance between the extremities of the outer pair of rectrices is nearly three inches; upper tail-coverts tipped with metallic green.

Dimensions:—

|             | Wing. | Tail. | Tarsus. | Culmen. |
|-------------|-------|-------|---------|---------|
|             | in.   | in.   | in.     | in.     |
| ♂ ♀ . . . . | 5.5   | 5.5   | 1.0     | 1.5     |

[P. Princesa, ♂, November 1877: iris crimson; bill and feet black. ♀, December: iris deep brown.]

All the female birds have the iris noted as being deep brown by Mr. Everett. On the label of one of the males Mr. Everett has written:—"Iris in the living bird deep crimson."

*D. palawanensis* most nearly resembles *D. leucops*, *D. pectoralis*, and *D. læmostictus*; but, besides being much smaller, the shape and position of the pectoral and gular spots are different, not being so round, but narrower.

### 13. BUCHANGA LEUCOPHÆA.

*Dicrurus leucophæus*, Vieill. Nouv. Dict. d'Hist. Nat. ix. p. 587.

*Buchanga cineracea* (Horsf.), Sharpe, *t. c.* p. 324. no. 48.

[P. Princesa, ♂, November 29, 1877: iris crimson; bill and feet black. ♂, December: iris deep rich orange-brown. ♀, December: iris orange-brown.]

### 14. CYORNIS BANYUMAS.

*Muscicapa banyumas*, Horsf. Tr. L. S. xiii. p. 146.

*Muscicapa cantatrix*, Tem. Pl. Col. 226.

[P. Princesa, ♂, December 1877: iris chocolate; bill black; legs and feet purplish grey; claws dark grey. ♀, January 1877: iris chocolate; bill black; legs lead-grey.]

The female of this species is well described, but badly figured, by Temminck (*l. c.*).

### 15. HYPOTHYMIS AZUREA (85).

[P. Princesa, ♀, December 1877: iris deep brown; bill entirely black, interior of gape golden; legs and feet dark blue-grey.]

### 16. HIRUNDO JAVANICA.

*Hirundo javanica*, Sparrm. Mus. Carls. t. 100.

[P. Princesa, ♀, December 7, 1877.]

17. *BRODERIPUS PALAWANENSIS*, n. sp.

[P. Princesa, ♀, January 1878.]

A representative form of *B. acrorhynchus*, but smaller and with a shorter bill. The yellow space included with the black horseshoe-mark on the head extends far beyond the eyes, and measures in depth over one inch. There is no yellow alar spot.

Dimensions :—

|           | Wing.<br>in. | Tail.<br>in. | Tarsus.<br>in. | Culmen.<br>in. |
|-----------|--------------|--------------|----------------|----------------|
| ♀ . . . . | 5·9          | 4·5          | 1·0            | 1·5            |

18. *ORIOLOS XANTHONOTUS*.

*Oriolus xanthonotus*, Horsf. Tr. L. S. xiii. p. 153; Zool. Res. Java, t. 46; Temm. Pl. Col. 214.

[P. Princesa, ♂, December 30, 1877: iris crimson; bill burnt sienna; legs dark lead-grey.]

In the colouring and markings the single specimen sent by Mr. Everett (an adult male) is not to be distinguished from Malaccan, Bornean, and Sumatran individuals; but it greatly exceeds them by its dimensions—wing 4·63 inches, tail 3·50.

19. *TRICHOSTOMA RUFIFRONS*, n. sp. (Plate XXXVIII.)

Mr. Everett has sent three skins of a Timeline bird which appear to belong to a somewhat aberrant form of the genus *Trichostoma*. The bill, seen in profile, has the exact contour of the bill of *T. abboti*, but is somewhat stouter; at the base it is slightly broader; and the rictal bristles are longer. The tail is also more graduated, the outer pair of rectrices being shorter than the penultimate pair, which, again, are not quite so long as the remainder. Perhaps this species is congeneric with the two described and figured by Mr. Sharpe (*t. c.*) under the titles of *Zeocephus cinnamomeus* and *Z. cyanescens* (species with which I am unacquainted); but if so, they cannot be classed under the Muscipidæ.

*Male and female.* Forehead bright rufous-brown, contrasting with the duller rufous-brown of the vertex and occiput. Nape and back earthy brown, tinged with olive and paler on the nape. Long, lax feathers of the uropygium bright rufous. Upper tail-coverts pure chestnut; rectrices dull chestnut. Loes and supercilium, which extends behind the eye, pure grey. Cheeks and ear-coverts greyish brown. Chin, throat, and vent pure white. Breast, abdomen, flanks, under tail-coverts, and under wing-coverts tawny, with a pale brown shade on the breast. Primaries brown, edged with pale tawny chestnut. Remaining quills and the wing-coverts dull chestnut, tinged with the colouring of the back.

Dimensions :—

|           | Wing.<br>in. | Tail.<br>in. | Tarsus.<br>in. | Culmen.<br>in. |
|-----------|--------------|--------------|----------------|----------------|
| ♂ . . . . | 3·37         | 3·50         | 1·00           | 0·94           |
| ♀ . . . . | 3·12         | 3·25         | 0·95           | 0·87           |



[P. Princessa, ♂ ♀, December 10, 1877: iris pale Naples-yellow; bill dark plumbeous; feet pale plumbeous.]

20. *DRYMOCATAPHUS CINEREICEPS*, n. sp.

This species is congeneric with *Brachypteryx malaccensis*, Hartl., which Count T. Salvadori retains under the genus *Brachypteryx*. But *B. malaccensis* is certainly nearer to *Drymocataphus* than to *Brachypteryx*, although it may perhaps be advisable to form a separate genus for its reception, more especially as the species which inhabits Palawan, about to be described, is identical in structure with the Malaccan and Bornean form (which is also said to inhabit Sumatra), and also as *Brachypteryx murinus* is congeneric.

*Female*. Forehead, crown, and occiput dark iron-grey. Ear-coverts, space before the eye, and nape pale grey. Back, uropygium, scapulars, upper tail-coverts, and exposed surface of wing and tail ruddy brown, brighter than in *D. malaccensis*. Dorsal plumes pale-shafted. Chin, throat, upper breast, abdomen, and vent pure white. Flanks, a band across the breast, under tail-coverts, and thigh-coverts, wing-lining, and axillaries pale rufous-brown.

Dimensions:—

|           | Wing. | Tail. | Tarsus. | Culmen. |
|-----------|-------|-------|---------|---------|
|           | in.   | in.   | in.     | in.     |
| ♀ . . . . | 2.50  | 1.00  | 1.06    | 0.75    |

[P. Princessa, ♀, January 1878: iris burnt sienna-orange; bill brownish grey, mandible white; legs pallid, the front of tarsus tinged brown.]

Distinguished from *D. malaccensis* by its dark-grey head, its light-grey ear-coverts, and the brighter rufous of the dorsal plumage.

21. *MIXORNIS WOODI*.

*Mixornis woodi*, Sharpe, *t. c.* p. 331. no. 69.

[P. Princessa, ♂, December 5, 1877: iris dark ochre-yellow; bill black, mandible grey; legs and feet horn-yellow. ♀, January 1878: iris ochreous orange; bill dark grey, mandible pale grey; legs greenish olive.]

22. *BRACHYPUS CINEREIFRONS*, n. sp.

*Male and female*. Chin, throat, and breast pale cinereous brown, palest and whitest on the chin and throat. Abdomen and ventral region pale yellowish white, in some examples with a certain admixture of the colouring of the breast. Flanks pale earthy-brown. Thigh-coverts ochreous yellow. Under tail-coverts light yellow, with a slight ochreous tinge. Wing-lining and axillaries pale yellow; carpal edge ochreous yellow. Ear-coverts pale cinereous, with almost white shafts. Space before the eye uniform dull brown. Cheeks dull cinereous brown, with a few white-shafted feathers. Head and nape olive-brown, tinged with pale grey, the frontal feathers being distinctly tipped and centred with pale grey. Back, scapulars, wing-coverts, and uropygium olive-brown, olive predomi-

nating, the long, lax, and fluffy uropygial feathers being of a slightly lighter shade of olive-green. Upper tail-coverts olive-green. Quills light brown, margined with a brighter olive-green. Rectrices light brown, edged with olive-green, and some with pallid yellowish apices. Underneath pale brown, washed with very light yellowish green. Shafts above brown, below yellowish white.

Dimensions :—

|           | Wing.<br>in. | Tail.<br>in. | Tarsus.<br>in. | Culmen.<br>in. |
|-----------|--------------|--------------|----------------|----------------|
| ♂ . . . . | 3·37         | 3·37         | 0·88           | 0·88           |
| ♀ . . . . | 3·25         | 3·12         | 0·87           | 0·75           |

[P. Princessa, ♂, December 14, 1877: iris deep rich burnt-sienna; bill blackish brown; legs and feet purple-brown. ♂, November 28: iris chocolate; bill dark brown; legs pale brown.]

One example marked ♀ equals the ♂ in its dimensions.

Mr. Everett procured a good series of this short-footed Thrush. At first sight it can be easily mistaken for *B. plumosus* (Blyth), of which it is a representative form. It is to be distinguished by its pale abdomen, which in *B. plumosus* is browner and nearly uniform with the breast, by its pale greyish breast, by its yellow under tail-coverts, which in *B. plumosus* are ochreous-brown, by its pale yellow, and not ochreous, wing-lining and axillaries, and by the cinereous or pearl-grey edgings and centres of the frontal plumes. Nor is the green of the quills and rectrices nearly so developed. The colouring of the abdominal plumage resembles that of *Iole olivacea*, but is not so distinctly yellow.

### 23. BRACHYPODIUS MELANOCEPHALUS.

*Lanius melanocephalus*, Gm. S. N. i. p. 309.

[P. Princessa, ♂ ♀, January 1878: iris violet-blue; bill and legs black.]

Undistinguishable from typical examples.

### 24. CRINIGER FRATER.

*Criniger frater*, Sharpe, *t. c.* p. 334. no. 77.

[P. Princessa, ♂, December 1, 1877: iris red-brown; bill horn-grey, darker on culmen. ♀, December: iris red-brown; bill dark grey; mandible whitish; legs, feet, and nails pallid brown.]

### 25. CRINIGER PALAWANENSIS, n. sp.

*Male and female.* Chin, lower breast, abdomen, vent, under tail-coverts, wing-lining, axillaries, and carpal edge bright yellow. Feathers of the throat, cheeks, and upper breast of the same yellow, the centres towards the apices being pale grey. These parts have thus a streaked appearance. Sides of the breast and the flanks clouded with pale brown; a few of the nareal plumes bright yellow. Space before the eye yellowish grey. Head, ear-coverts, and nape reddish brown, the frontal and coronal plumes being sublanceolate and with pale central streaks. Back, scapulars, wing-coverts, and uropygium

ruddy olive-brown. Upper tail-coverts, which are almost concealed by the mass of loose and lax uropygial plumes, ruddy brown. Rectrices of a darker tone than the tail-coverts. Quills brown, margined with the colour of the dorsal plumage.

Dimensions:—

|               | Wing. | Tail. | Tarsus. | Culmen. |
|---------------|-------|-------|---------|---------|
|               | in.   | in.   | in.     | in.     |
| ♂ ♀ . . . . . | 3·25  | 3·20  | 0·75    | 0·87    |

[P. Princessa, ♂, January 1878: iris lemon-yellow. ♀, December 27, 1877: iris lemon-yellow; bill dark smoky grey, the mandible whitish; legs and claws pale brown.]

#### 26. PHYLLORNIS PALAWANENSIS.

*Phyllornis palawanensis*, Sharpe, *t. c.* p. 333. no. 72, t. 50. f. 1, 2.

[P. Princessa, ♂ ♀, January 1878.]

The only example marked ♀ has the terminal portions of the moustache deep blue. Two examples marked ♂ have it white. Mr. Sharpe's conclusions (*l. c.*) on the point were the reverse. This is one of the most beautiful species of the genus. The throat is bright golden; and the whole colouring of Mr. Keuleman's figures (*l. c.*) is much too pallid.

#### 27. ÆGITHINA SCAPULARIS.

*Iora scapularis*, Horsf. Tr. L. S. xiii. p. 158.

[P. Princessa, ♂ ♀, December 12, 1877: iris white; bill lead-grey, the culmen black; legs and feet bluish grey; claws black.]

All the males are without a trace of black on the upper parts. They agree with Bornean and Malaccan examples (*I. viridis*, Bp.?). Bornean individuals are stated by Count T. Salvadori to be identical with Javan (*Ucc. Borneo*, p. 191).

#### 28. MONTICOLA SOLITARIUS (103).

[P. Princessa, ♂ ♀, December 1877.]

#### 29. CITTOCINCLA NIGRA.

*Cittocincla nigra*, Sharpe, *t. c.* p. 335. no. 82, t. lii. f. 1, 2.

[P. Princessa, ♂, December 14, 1877: iris very dark brown; bill, legs, and feet black. ♀, January 1878: iris dark brown; bill black; legs lead-grey.]

#### 30. ORTHOTOMUS RUFICEPS.

*Edela ruficeps*, Lesson, Tr. d'Orn. p. 309.

[P. Princessa, ♂ ♀, December 1877.]

#### 31. ANTHUS MACULATUS.

*Anthus maculatus*, Hodgs. Gray's Zool. Misc. p. 83; Tweeddale, P. Z. S. 1877, p. 596. no. 48.

[P. Princessa, ♀, January 2, 1878.]

## 32. MYZANTHE PYGMÆA (121).

[P. Princessa, ♂, January 7, 1877 : iris dark brown ; bill and legs black.]

## 33. NECTAROPHILA SPERATA (122).

[P. Princessa, ♂, January 1878. ♀, December 29, 1878 : iris warm brown.]

Two males, not adult ; the violet throat and plastron bounded on both sides with a white border, the scarlet breast mixed with white, the crown dingy dull brown.

## 34. CYRTOSTOMUS AURORA, n. sp.

Notwithstanding that Captain Shelley, in his beautiful work on the Sun-birds, includes the large group of Asiatic and Australian Nectariniidæ, of which *C. jugularis* and *C. asiaticus* may be taken as types, along with a number of other species, under Cuvier's genus *Cinnyris*, I still adhere to the view expressed by me (*Ibis*, 1870, p. 19) that these Sun-birds form a natural, distinctive, and separate section of the family. For it I adopted Dr. Cabanis's generic title *Arachnechthra* ; but as the type of that genus is *C. lotenia*, L., which may be considered generically separable (although not so in my opinion), and as Dr. Cabanis established his genus *Cyrtostomus* (type *C. jugularis*, L.) before that of *Arachnechthra*, according to strict rule, the generic title of *Cyrtostomus* should be employed ; and I observe that this is the view of Count Salvadori. There are now twelve species of this group described—namely, *C. asiaticus*, *C. lotenia*, *C. osea*, *C. brevirostris*, *C. flammaxillaris*, *C. andamanicus*, *C. rhizophoræ*, *C. pectoralis*, *C. frenatus*, *C. jugularis*, *C. zenobia*, and *C. solaris*. To this list Mr. Everett's researches in Palawan enable me to add a thirteenth.

*Male*. Above uniform dark olive-green. Forehead, chin, throat, cheeks, and upper breast metallic steel-blue with shades of green and violet in certain lights. Lower breast fiery orange-red. Remainder of lower surface, under tail-coverts, and wing-lining bright yellow. Quills brown, faintly edged with olive-green. Rectrices black ; terminal half of outer pair white, a broad white terminal patch on the penultimate pair ; apices of third pair fringed with white, of fourth pair still less so.

*Female*. Above and ear-coverts olive-green, slightly lighter in shade than that of male. Superciliaries, cheeks, and all the under surface and the wing-lining bright yellow. Wing-feathers brown, margined with olive-green. Rectrices as in male.

Dimensions :—

|             | Wing.<br>in. | Tail.<br>in. | Tarsus.<br>in. | Culmen.<br>in. |
|-------------|--------------|--------------|----------------|----------------|
| ♂ . . . . . | 2·25         | 1·62         | 0·62           | 1·00           |
| ♀ . . . . . | 2·00         | 1·62         | 0·60           | 0·87           |

[P. Princessa, ♂, November 30, 1877 : iris deep crimson ; bill and legs black. ♀, January : iris dark brown ; bill and legs black.]

The flame-coloured lower breast at once distinguishes this Sun-bird from all others. Its nearest ally is *C. solaris*, in which the flame-colour covers the abdomen also.

35. *CHALCOSTETHA INSIGNIS*.

*Nectarinia insignis*, Jardine, Nat. Lib. xxxvi. p. 274.

[P. Princesa, ♂, January 1878: iris warm brown; bill and legs black.]

A single example of an adult male, and not to be distinguished from Sumatran and Malaccan individuals.

36. *ÆTHOPYGA SHELLEYI*.

*Æthopyga shelleyi*, Sharpe, Nature, 3rd August, 1876, p. 297; Tr. L. S. 2nd ser. Zool. i. p. 343. no. 105; Shelley, Monogr. Cinnnyridæ, pt. iii. t.

[P. Princesa, ♂, December 2, 1877: iris brown; bill black; legs and feet very dark brown. ♀ (?), January 4, 1877: bill and legs dark brown.]

The female has not been described; and it is with some doubt that I so identify the single skin noted above. The chin, throat, and upper breast is pale grey; the lower breast and abdomen and wing-lining are pale yellowish white. The vent and under tail-coverts of a more decided shade of yellow. The head is greyish olive-brown. Remainder of upper surface a clear olive-green, lightest on the upper tail-coverts. The quills and rectrices are dark brown edged with olive-green, having a slight ruddy hue. Cheeks and ear-coverts pale grey with a greenish tinge. The dimensions are sensibly smaller than those of the male—wing 1.75; culmen 0.56.

37. *ANTHREPTES MALACCENSIS*.

*Certhia malaccensis*, Scopoli, Del. Flor. et Faun. Insubr. ii. p. 91. no. 62.

[P. Princesa, ♂, January 1878: iris Indian red; bill black; legs greyish olive; scales of feet yellow. ♀, December 29, 1877: iris bright Indian red; bill very dark sepia-brown; legs and feet yellowish olive; soles of feet yellow; claws pale brown. ♂ (jun.), November 27, 1877: iris Indian red; bill dark brown; legs yellowish olive.]

The example of the young male above noted is in the exact plumage of the adult female, its sex being betrayed by a couple of metallic plumes on the crown.

38. *ARACHNOTHERA DILUTIOR*.

*Arachnothera dilutior*, Sharpe, Nature, 3rd August, 1876, p. 297; t. c. p. 341. no. 100; Shelley, Cinnnyridæ, pt. iii. t.

[P. Princesa, ♂, December 6, 1877: iris brown; bill black; legs and feet dark grey. ♀, January 1878: iris dark brown; denuded orbital skin green-yellow; bill black; mandible grey; legs and feet blue-grey.]

Bill of female considerably shorter than that of male.

39. *CORVUS PUSILLUS*, n. sp.

*Female*. Basal portion of plumage white. Above purple-black, with a slight greyish shade. Wing-coverts and outer margins of rectrices deep purple-black. Plumage underneath dull ashy black, with a purplish gloss on cheeks and throat. Contour of bill as in the *C. validus* group.

Dimensions :—

|             | Wing. | Tail. | Tarsus. | Culmen. |
|-------------|-------|-------|---------|---------|
|             | in.   | in.   | in.     | in.     |
| ♀ . . . . . | 8.75  | 5.25  | 1.75    | 2.12    |

[P. Princesa, ♀, December 27, 1877: iris deep brown; bill, legs, and claws shining black.]

This Crow, or rather small Raven, is a diminutive form of *C. validus* and its allies. It has no affinity with true *C. enca*.

40. *CALORNIS PANAYENSIS* (128).

*Calornis chalybeus* (Horsf.), Sharpe, *t. c.* p. 343. no. 111.

[P. Princesa, ♀, December 1877: iris brilliant red; bill and feet black.]

A large series is sent by Mr. Everett, which I refer to the Philippine rather than to the Bornean species.

41. *GRACULA JAVANENSIS*.

*Corvus javanensis*, Osbeck, Voy. China & E. Ind. i. p. 157, "Java" (Eng. tr. 1771).

[P. Princesa, ♂, January 1878: iris deep brown; bill fine deep orange; wattles and legs chrome-yellow; claws dark brown. ♀, December 3, 1877: iris deep brown; bill red-orange; wattles orange-yellow; legs yellow.]

These examples are not to be distinguished from Bornean, although they are somewhat smaller and have slenderer bills than Javan and Sumatran individuals.

42. *OXYCERCA EVERETTI*.

*Oxycerca everetti*, Tweeddale, P. Z. S. 1877, p. 699, t. lxxiii. f. 2.

[P. Princesa, ♂, December 1877: iris rich deep orange-brown; bill, maxilla black, mandible pale grey; feet, legs, and claws dark lead-grey. ♂ juv.: iris umber-brown; mandible blackish; maxilla black; angle of gape pure white; legs, feet, and claws lead-grey.]

*Oxycerca everetti* is a very closely allied form of *O. leucogastra* of Malacca and Borneo, mainly to be distinguished by the crown of the head being striated in the former and uniform in the latter, and the breast and general colouring being nutmeg-brown and not sooty brown. These Palawan examples, although not quite identical with either species, most nearly resemble *O. everetti*. The general tone of colour is nutmeg-brown; but the crown of the head is not striated.

## 43. OSMOTRERON VERNANS (135).

[P. Princesa, ♀, January 2, 1878: iris (in dead bird) orange; bill lead-grey, base yellow-olive; feet carmine; claws grey.]

## 44. TRERON NASICA.

*Treron nasica*, Schlegel, Ned. Tijdschr. Dierk. i. p. 67.

[P. Princesa, ♂ ♀, January 1878: iris deep brown, with outer ring of burnt sienna-orange; orbital skin bright emerald-green; base of bill dull crimson, the rest pale greenish-yellow; feet carmine.]

## 45. CARPOPHAGA ÆNEA (141).

[P. Princesa, ♂, January 1878: iris pure crimson; bill bluish grey; feet violet-carmine; nails dark grey. ♀, December 28, 1877: iris deep crimson; orbital ring crimson; bill light grey; feet carmine; nails dark grey.]

## 46. POLYPECTRON EMPHANES.

*Polyplectron emphanum*, Temm. Pl. Col. 540; Elliot, Phasianidæ, vol. i. pl. 9.

[P. Princesa, ♂, January 1878: iris dark rich brown; orbital and loreal regions crimson; bare setigerous skin above the eye livid brown; bill, including vaulted base of maxilla, very dark brown, tip horny; legs, feet, and nails purple-brown.

Native name "Tandikan."

♀ juv.: orbital skin black, otherwise not different from the male.]

The male of this beautiful Pheasant was first described and figured by Temminck on the 14th of May, 1831, from a single example in the museum of the Prince of Essling (*l. c.*). Its habitat was unknown, but was believed to be either one of the Sunda Islands or else one of the Moluccas. In the same year, but earlier, Lesson (*Tr.* p. 437) enumerated the species under number 47 of the genus *Polyplectron*, and called it *P. napoleonis*; but as he gave no description, his title falls.

A second specimen of the species was afterwards acquired from Messrs. Verreaux by the British Museum; but the habitat still remained unknown, the late Mr. G. R. Gray giving it as the Moluccas (*List Birds B. Mus., Gallinæ, 1867, p. 25*). Mr. Sclater (*P. Z. S. 1863, p. 124*) attributed its habitat, with some doubt, to the island of Borneo, in which he was followed by Mr. Elliot (*l. c.*). Mr. Everett has now cleared up all doubts; for he has found this Pheasant living in the island of Palawan near the Spanish settlement of Puerto Princesa, and has sent me three examples—one of the adult male, one of the immature female, and one of an immature male.

This is the second instance in which Mr. Everett has established the correct habitat of a little-known and remarkable bird.

The young male has the lengthened crest-plumes brown, partially tinged with green. The brilliant bluish-purple wing-coverts and interscapulars of the fully adult are absent, only a trace presenting itself on one covert of each wing. Whereas in the adult the nape and neck are black with brilliant green borders to the feathers, and

the whole throat and breast are black with green reflexions, the immature bird is brown. The quills and underparts are also very dark brown in the adult, whereas in the immature bird they are light brown. The ocelli on the rectrices in the immature bird are not so perfectly formed, and the dark brown ground-colour of the dorsal plumage and of the rectrices is not so well defined.

The skin of the female (immature) has the chin, space before the eye, and throat dingy white. The green ocelli only occur on some of the rectrices, and are small. The remainder of the plumage resembles that of the young male, the crest being shorter and uniform brown.

#### 47. MEGAPODIUS CUMINGII.

*Megapodius cumingii*, Dillwyn, P. Z. S. 1851, p. 118, t. 39.

[P. Princessa, ♂, January 1878: iris warm brown; orbital skin coral; auricular region washed with bright red; bill horn-yellow; legs reddish, brighter than in female; tarsal scutellæ and feet dark olivaceous brown; the red of the face brighter than in female.

♂ juv., January 1878: character of soft parts as in mature male, only paler. ♀, January 2, 1878: iris warm brown; bill horn-yellow; orbital skin coral; auricular region washed with vermilion-red (not crimson); legs yellowish grey, the tarsal scutellæ dark grey.

*Note.*—In these birds the bill is sometimes horn-yellow, sometimes the same more or less deeply tinged with brown on culmen and at the base. “Tabun” of the natives.]

Dimensions:—

|             | Wing.<br>in. | Tail.<br>in. | Tarsus.<br>in. | Culmen.<br>in. |
|-------------|--------------|--------------|----------------|----------------|
| ♂ . . . . . | 9·00         | 3·50         | 2·50           | 1·25           |
| ♀ . . . . . | 9·25         | 3·50         | 2·50           | 1·18           |

The Palawan megapode closely resembles the Labuan (*M. cumingii*), and can hardly be separated specifically. In this view Mr. Sharpe concurs.

#### 48. EUDROMIAS GEOFFROYI (161).

[P. Princessa, ♂, November 29, 1877.]

#### 49. ÆGIALITES CANTIANUS.

*Charadrius cantianus*, Lath. Suppl. Ind. Orn. p. lxvi.

[P. Princessa, ♀, November 29, 1877.]

#### 50. TRINGOIDES HYPOLEUCUS (183).

[P. Princessa, ♀, December 11, 1877.]

#### 51. BUBULCUS COROMANDUS (194).

[P. Princessa, ♂ ♀, December 1877.]

Forehead in both examples buffy yellow.

#### 52. BUTORIDES JAVANICA (197).

[P. Princessa, ♀ juv., January 6, 1878.]